

Notice of Allowability

Application No.

10/815,985

Examiner

Jeremiah Avery

Applicant(s)

RABIN ET AL.

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/30/07.
2. ☒ The allowed claim(s) is/are 1-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Ms. Giovanna Fessenden on 06/06/07.
3. The application has been amended with regards to claim 1 as follows:
 1. A method for creating a superfingerprint for identifying a protected software comprising:
 - creating a superfingerprint for said protected software by:
 - executing said protected software at least once;
 - in each execution, using a supervising program, selecting specified portions of the executing image of at least one of said executing software and of results of executing said protected software;
 - in each execution, using a supervising program, performing computations on said selected portions to obtain a collection of fingerprints; and
 - combining, using the supervising program, said collections of fingerprints found in each execution into the superfingerprint of said protected software according to a combining rule;
 - at a later time, detecting execution of an unidentified software; and using the superfingerprint of the protected software to identify the executing unidentified

software, where the executing unidentified software is identified as the protected software using the superfingerprint even if the executing unidentified software and the protected software are not exactly the same by:

selecting by a supervising program specified portions of the executing image of at least one of said executing unidentified software and of the results of executing said executing unidentified first software on each execution;

performing by said supervising program specified computations on said selected portions to obtain a collection of fingerprints from the executing unidentified software;

comparing said collection of fingerprints from the executing unidentified software to a previously computed superfingerprint of the protected software to determine whether there is an approximate match; and
declaring said the executing unidentified software to be the same as said the protected software if an approximate match is found.

Examiner's Statement of Reasons for Allowance

4. The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.
5. As per claims 1, 26, 49 and 50, generally, the prior art of record, United States Patent No. 7,043,636 to Smeets fails to teach alone, or in combination, other than via hindsight, at the time of the invention, the features as discussed and remarked upon in the response filed 4/30/07.

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6. Specifically, (as per claim 1, for example) prior art dealing with the creation and utilization of fingerprints is known to exist, (i.e., the non-patent literature document titled, "Protecting mobile agents by using traceability techniques" found on the World Wide Web at:

<http://ieeexplore.ieee.org/iel5/8953/28360/01270618.pdf?tp=&arnumber=1270618&isnumber=28360>). Nowhere in the prior art is found, collectively, the *italicized* claim elements (i.e., "*selecting specified portions of the executing image of at least one of said executing protected software and of results of executing said protected software*"), at the time of the invention; serving to patentably distinguish the invention from said prior art;

"1. A method for creating a superfingerprint for identifying a protected software comprising:

creating a superfingerprint for said protected software by:

executing said protected software at least once;

in each execution, using a supervising program, selecting specified portions of the executing image of at least one of said executing software and of results of executing said protected software;

in each execution, using a supervising program, performing computations on said selected portions to obtain a collection of fingerprints; and

combining, using the supervising program, said collections of fingerprints found in each execution into the superfingerprint of said protected software according to a combining rule;

at a later time, detecting execution of an unidentified software; and using the superfingerprint of the protected software to identify the executing unidentified software, where the executing unidentified software is identified as the protected software using the superfingerprint even if the executing unidentified software and the protected software are not exactly the same by:

selecting by a supervising program specified portions of the executing image of at least one of said executing unidentified software and of the results of executing said executing unidentified first software on each execution;

performing by said supervising program specified computations on said selected portions to obtain a collection of fingerprints from the executing unidentified software;


comparing said collection of fingerprints from the executing unidentified software to a previously computed superfingerprint of the protected software to determine whether there is an approximate match; and declaring said the executing unidentified software to be the same as said the protected software if an approximate match is found."

7. Claims 2-25 and 27-48 are allowed by virtue of their dependencies upon claims 1 and 26, respectively.

Conclusion

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremiah Avery whose telephone number is (571) 272-8627. The examiner can normally be reached on Monday thru Friday 8:30am-5pm.
10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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